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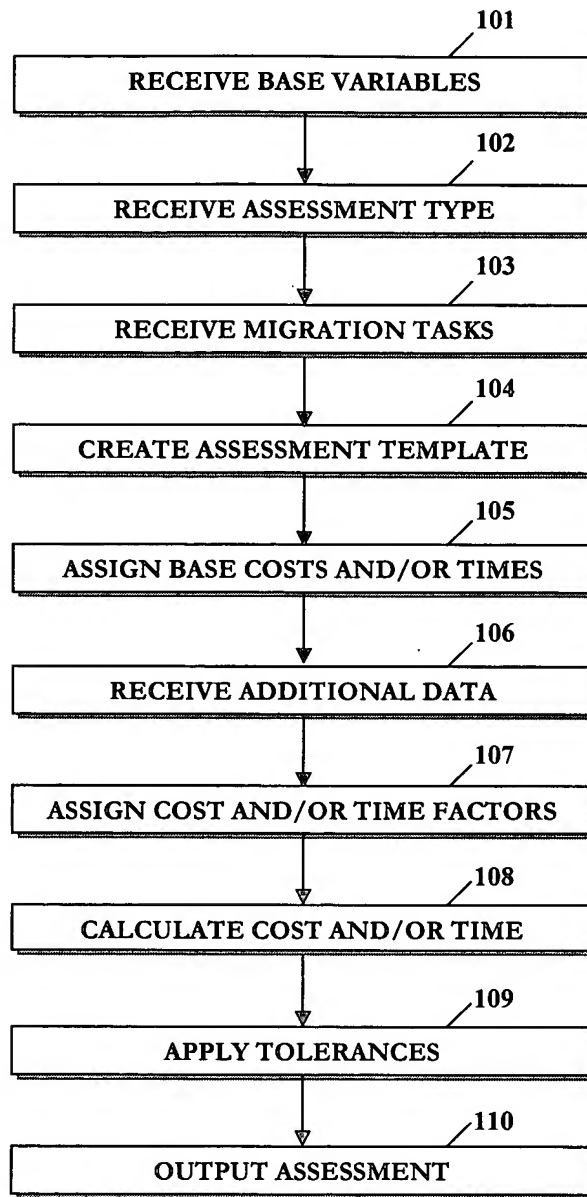


FIG. 1

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ASSESSMENT TEMPLATE

Task No.	Migration Task	Estimated Cost	Estimated Time Requirement
1	System Build	$f(c_1)$	$f(t_1)$
2	Baseline Test	$f(c_2)$	$f(t_2)$
3	Migration	$f(c_3)$	$f(t_3)$
4	System Test	$f(c_4)$	$f(t_4)$
5	Export Data	$f(c_5)$	$f(t_5)$
6	Import Data	$f(c_6)$	$f(t_6)$
7	Deployment	$f(c_7)$	$f(t_7)$
	TOTALS		

FIG. 2

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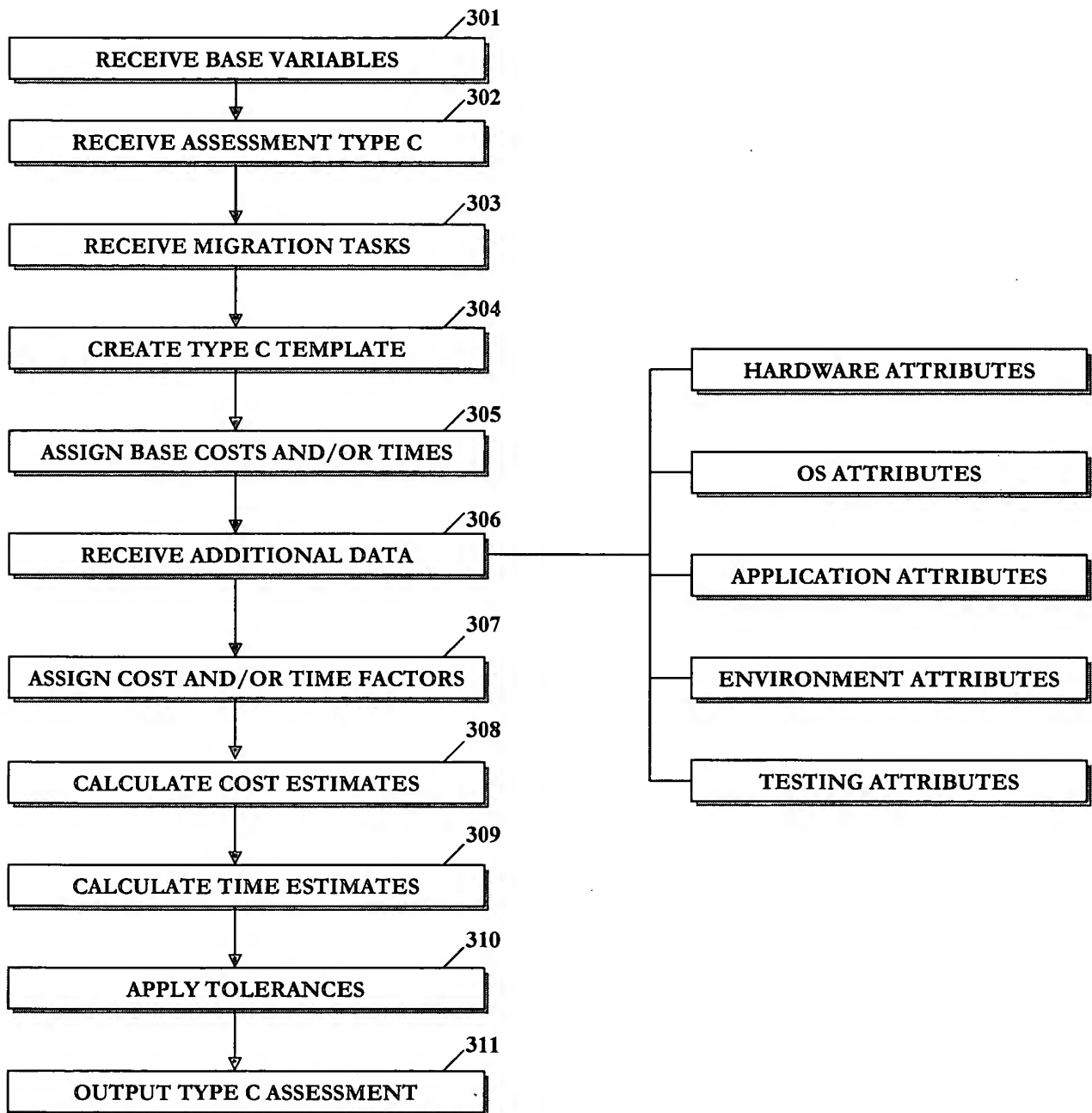


FIG. 3

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BASE COST MATRIX

TASK NO.	MIGRATION TASK	AVERAGE BASE COST
1	System Build	¹ β
2	Baseline Test	² β
3	Migration	³ β
4	System Test	⁴ β
5	Export Data	⁵ β
6	Import Data	⁶ β
7	Deployment	⁷ β

FIG. 4A

COMPLEXITY COST FACTOR MATRIX FOR {SOURCE-TARGET} COMBINATION				
TASK NO.	MIGRATION TASK	GENERIC UNIX to GENERIC UNIX	VMS/OpenVMS to GENERIC UNIX	GENERIC UNIX to UNIX VARIANT
1	System Build	$^1\lambda_{U-U}$	$^1\lambda_{VMS-U}$	$^1\lambda_{U-VAR}$
2	Baseline Test	$^2\lambda_{U-U}$	$^2\lambda_{VMS-U}$	$^2\lambda_{U-VAR}$
3	Migration	$^3\lambda_{U-U}$	$^3\lambda_{VMS-U}$	$^3\lambda_{U-VAR}$
4	System Test	$^4\lambda_{U-U}$	$^4\lambda_{VMS-U}$	$^4\lambda_{U-VAR}$
5	Export Data	$^5\lambda_{U-U}$	$^5\lambda_{VMS-U}$	$^5\lambda_{U-VAR}$
6	Import Data	$^6\lambda_{U-U}$	$^6\lambda_{VMS-U}$	$^6\lambda_{U-VAR}$
7	Deployment	$^7\lambda_{U-U}$	$^7\lambda_{VMS-U}$	$^7\lambda_{U-VAR}$

FIG. 4B

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HARDWARE COST FACTOR MATRIX
FOR {SOURCE-TARGET} MIGRATION

TASK NO.	MIGRATION TASK	CLUSTERED to DISTRIBUTED	STANDARD CONN.to CUSTOM CONN.	MULTI PROCESSOR to SINGLE PROCESSOR	BIG ENDIAN to LITTLE ENDIAN
1	System Build	${}^1\bar{h}_1$	${}^1\bar{h}_2$	${}^1\bar{h}_3$	....	${}^1\bar{h}_k$
2	Baseline Test	${}^2\bar{h}_1$	${}^2\bar{h}_2$	${}^2\bar{h}_3$	....	${}^2\bar{h}_k$
3	Migration	${}^3\bar{h}_1$	${}^3\bar{h}_2$	${}^3\bar{h}_3$	....	${}^3\bar{h}_k$
4	System Test	${}^4\bar{h}_1$	${}^4\bar{h}_2$	${}^4\bar{h}_3$	....	${}^4\bar{h}_k$
5	Export Data	${}^5\bar{h}_1$	${}^5\bar{h}_2$	${}^5\bar{h}_3$	${}^5\bar{h}_k$
6	Import Data	${}^6\bar{h}_1$	${}^6\bar{h}_2$	${}^6\bar{h}_3$	${}^6\bar{h}_k$
7	Deployment	${}^7\bar{h}_1$	${}^7\bar{h}_2$	${}^7\bar{h}_3$	${}^7\bar{h}_k$

FIG. 5

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OS COST FACTOR MATRIX
FOR {SOURCE-TARGET} MIGRATION

TASK NO.	MIGRATION TASK	WINDOWS NT	SUN SOLARIS	OS/400	VSE/ESA	IBM TPF	CICS	PC DOS	z/OS
1	System Build	${}^1\omega_1$	${}^1\omega_2$	${}^1\omega_3$	${}^1\omega_4$	${}^1\omega_5$	${}^1\omega_6$	${}^1\omega_7$	${}^1\omega_m$
2	Baseline Test	${}^2\omega_1$	${}^2\omega_2$	${}^2\omega_3$	${}^2\omega_4$	${}^2\omega_5$	${}^2\omega_6$	${}^2\omega_7$	${}^2\omega_m$
3	Migration	${}^3\omega_1$	${}^3\omega_2$	${}^3\omega_3$	${}^3\omega_4$	${}^3\omega_5$	${}^3\omega_6$	${}^3\omega_7$	${}^3\omega_m$
4	System Test	${}^4\omega_1$	${}^4\omega_2$	${}^4\omega_3$	${}^4\omega_4$	${}^4\omega_5$	${}^4\omega_6$	${}^4\omega_7$	${}^4\omega_m$
5	Export Data	${}^5\omega_1$	${}^5\omega_2$	${}^5\omega_3$	${}^5\omega_4$	${}^5\omega_5$	${}^5\omega_6$	${}^5\omega_7$	${}^5\omega_m$
6	Import Data	${}^6\omega_1$	${}^6\omega_2$	${}^6\omega_3$	${}^6\omega_4$	${}^6\omega_5$	${}^6\omega_6$	${}^6\omega_7$	${}^6\omega_m$
7	Deployment	${}^7\omega_1$	${}^7\omega_2$	${}^7\omega_3$	${}^7\omega_4$	${}^7\omega_5$	${}^7\omega_6$	${}^7\omega_7$	${}^7\omega_m$

FIG. 6

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APPLICATION COST FACTOR MATRIX FOR {SOURCE-TARGET} MIGRATION								
TASK NO.	MIGRATION TASK	REAL-TIME OPERATION	MISSION CRITICAL	OLTP	BATCH PROCESSING	DATA MINING	USER INTERACTIVE	PRODUXN CONTROL
1	System Build	$^1\alpha_1$	$^1\alpha_2$	$^1\alpha_3$	$^1\alpha_4$	$^1\alpha_5$	$^1\alpha_6$	$^1\alpha_n$
2	Baseline Test	$^2\alpha_1$	$^2\alpha_2$	$^2\alpha_3$	$^2\alpha_4$	$^2\alpha_5$	$^2\alpha_6$	$^2\alpha_n$
3	Migration	$^3\alpha_1$	$^3\alpha_2$	$^3\alpha_3$	$^3\alpha_4$	$^3\alpha_5$	$^3\alpha_6$	$^3\alpha_n$
4	System Test	$^4\alpha_1$	$^4\alpha_2$	$^4\alpha_3$	$^4\alpha_4$	$^4\alpha_5$	$^4\alpha_6$	$^4\alpha_n$
5	Export Data	$^5\alpha_1$	$^5\alpha_2$	$^5\alpha_3$	$^5\alpha_4$	$^5\alpha_5$	$^5\alpha_6$	$^5\alpha_n$
6	Import Data	$^6\alpha_1$	$^6\alpha_2$	$^6\alpha_3$	$^6\alpha_4$	$^6\alpha_5$	$^6\alpha_6$	$^6\alpha_n$
7	Deployment	$^7\alpha_1$	$^7\alpha_2$	$^7\alpha_3$	$^7\alpha_4$	$^7\alpha_5$	$^7\alpha_6$	$^7\alpha_n$

FIG. 7

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ENVIRONMENT COST FACTOR MATRIX FOR {SOURCE-TARGET} MIGRATION					
TASK NO.	MIGRATION TASK	128-bit SSL SECURITY	HTTP USAGE	COBOL	Custom Language Functions
1	System Build	1e_1	1e_2	1e_3	1e_p
2	Baseline Test	2e_1	2e_2	2e_3	2e_p
3	Migration	3e_1	3e_2	3e_3	3e_p
4	System Test	4e_1	4e_2	4e_3	4e_p
5	Export Data	5e_1	5e_2	5e_3	5e_p
6	Import Data	6e_1	6e_2	6e_3	6e_p
7	Deployment	7e_1	7e_2	7e_3	7e_p

FIG. 8

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BASE TIME REQUIREMENT MATRIX

TASK NO.	MIGRATION TASK	AVERAGE BASE TIME REQUIREMENT
1	System Build	1_T
2	Baseline Test	2_T
3	Migration	3_T
4	System Test	4_T
5	Export Data	5_T
6	Import Data	6_T
7	Deployment	7_T

FIG. 9A

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COMPLEXITY TIME FACTOR MATRIX

TASK NO.	MIGRATION TASK	GENERIC UNIX to GENERIC UNIX	VMS/OpenVMS to GENERIC UNIX	GENERIC UNIX to UNIX VARIANT
1	System Build	$^1\psi_{U-U}$	$^1\psi_{VMS-U}$	....	$^1\psi_{U-VAR}$
2	Baseline Test	$^2\psi_{U-U}$	$^2\psi_{VMS-U}$	....	$^2\psi_{U-VAR}$
3	Migration	$^3\psi_{U-U}$	$^3\psi_{VMS-U}$	....	$^3\psi_{U-VAR}$
4	System Test	$^4\psi_{U-U}$	$^4\psi_{VMS-U}$	....	$^4\psi_{U-VAR}$
5	Export Data	$^5\psi_{U-U}$	$^5\psi_{VMS-U}$	$^5\psi_{U-VAR}$
6	Import Data	$^6\psi_{U-U}$	$^6\psi_{VMS-U}$	$^6\psi_{U-VAR}$
7	Deployment	$^7\psi_{U-U}$	$^7\psi_{VMS-U}$	$^7\psi_{U-VAR}$

FIG. 9B

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**HARDWARE TIME FACTOR MATRIX
FOR {SOURCE-TARGET} MIGRATION**

TASK NO.	MIGRATION TASK	CLUSTERED to DISTRIBUTED	STANDARD CONN.to CUSTOM CONN.	MULTI PROCESSOR to SINGLE PROCESSOR	BIG ENDIAN to LITTLE ENDIAN
1	System Build	¹ _{HC-D}	¹ _{HSC-CC}	¹ _{HMP-SP}	¹ _{HBE-LE}
2	Baseline Test	² _{HC-D}	² _{HSC-CC}	² _{HMP-SP}	² _{HBE-LE}
3	Migration	³ _{HC-D}	³ _{HSC-CC}	³ _{HMP-SP}	³ _{HBE-LE}
4	System Test	⁴ _{HC-D}	⁴ _{HSC-CC}	⁴ _{HMP-SP}	⁴ _{HBE-LE}
5	Export Data	⁵ _{HC-D}	⁵ _{HSC-CC}	⁵ _{HMP-SP}	⁵ _{HBE-LE}
6	Import Data	⁶ _{HC-D}	⁶ _{HSC-CC}	⁶ _{HMP-SP}	⁶ _{HBE-LE}
7	Deployment	⁷ _{HC-D}	⁷ _{HSC-CC}	⁷ _{HMP-SP}	⁷ _{HBE-LE}

FIG. 10

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OS TIME FACTOR MATRIX
FOR {SOURCE-TARGET} MIGRATION

TASK NO.	MIGRATION TASK	WINDOWS NT	SUN SOLARIS	OS/400	VSE/ESA	IBM TPF	CICS	PC DOS	Z/OS
1	System Build	${}^1\theta_1$	${}^1\theta_2$	${}^1\theta_3$	${}^1\theta_4$	${}^1\theta_5$	${}^1\theta_6$	${}^1\theta_7$	${}^1\theta_m$
2	Baseline Test	${}^2\theta_1$	${}^2\theta_2$	${}^2\theta_3$	${}^2\theta_4$	${}^2\theta_5$	${}^2\theta_6$	${}^2\theta_7$	${}^2\theta_m$
3	Migration	${}^3\theta_1$	${}^3\theta_2$	${}^3\theta_3$	${}^3\theta_4$	${}^3\theta_5$	${}^3\theta_6$	${}^3\theta_7$	${}^3\theta_m$
4	System Test	${}^4\theta_1$	${}^4\theta_2$	${}^4\theta_3$	${}^4\theta_4$	${}^4\theta_5$	${}^4\theta_6$	${}^4\theta_7$	${}^4\theta_m$
5	Export Data	${}^5\theta_1$	${}^5\theta_2$	${}^5\theta_3$	${}^5\theta_4$	${}^5\theta_5$	${}^5\theta_6$	${}^5\theta_7$	${}^5\theta_m$
6	Import Data	${}^6\theta_1$	${}^6\theta_2$	${}^6\theta_3$	${}^6\theta_4$	${}^6\theta_5$	${}^6\theta_6$	${}^6\theta_7$	${}^6\theta_m$
7	Deployment	${}^7\theta_1$	${}^7\theta_2$	${}^7\theta_3$	${}^7\theta_4$	${}^7\theta_5$	${}^7\theta_6$	${}^7\theta_7$	${}^7\theta_m$

FIG. 11

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APPLICATION TIME FACTOR MATRIX FOR {SOURCE-TARGET} MIGRATION									
TASK NO.	MIGRATION TASK	REAL-TIME OPERATION	MISSION CRITICAL	OLTP	BATCH PROCESSING	DATA MINING	USER INTERACTIVE	PRODUXN CONTROL	
1	System Build	1D_1	1D_2	1D_3	1D_4	1D_5	1D_6	.....	{}^1D_n
2	Baseline Test	2D_1	2D_2	2D_3	2D_4	2D_5	2D_6	.....	{}^2D_n
3	Migration	3D_1	3D_2	3D_3	3D_4	3D_5	3D_6	.....	{}^3D_n
4	System Test	4D_1	4D_2	4D_3	4D_4	4D_5	4D_6	.....	{}^4D_n
5	Export Data	5D_1	5D_2	5D_3	5D_4	5D_5	5D_6	.....	{}^5D_n
6	Import Data	6D_1	6D_2	6D_3	6D_4	6D_5	6D_6	6D_n
7	Deployment	7D_1	7D_2	7D_3	7D_4	7D_5	7D_6	7D_n

FIG. 12

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ENVIRONMENT TIME FACTOR MATRIX FOR {SOURCE-TARGET} MIGRATION						
TASK NO.	MIGRATION TASK	128-bit SSL SECURITY	HTTP USAGE	COBOL	Custom Language Functions	
1	System Build	¹ X ₁	¹ X ₂	¹ X ₃	....	¹ X _p
2	Baseline Test	² X ₁	² X ₂	² X ₃	....	² X _p
3	Migration	³ X ₁	³ X ₂	³ X ₃	....	³ X _p
4	System Test	⁴ X ₁	⁴ X ₂	⁴ X ₃	....	⁴ X _p
5	Export Data	⁵ X ₁	⁵ X ₂	⁵ X ₃	⁵ X _p
6	Import Data	⁶ X ₁	⁶ X ₂	⁶ X ₃	⁶ X _p
7	Deployment	⁷ X ₁	⁷ X ₂	⁷ X ₃	⁷ X _p

FIG. 13

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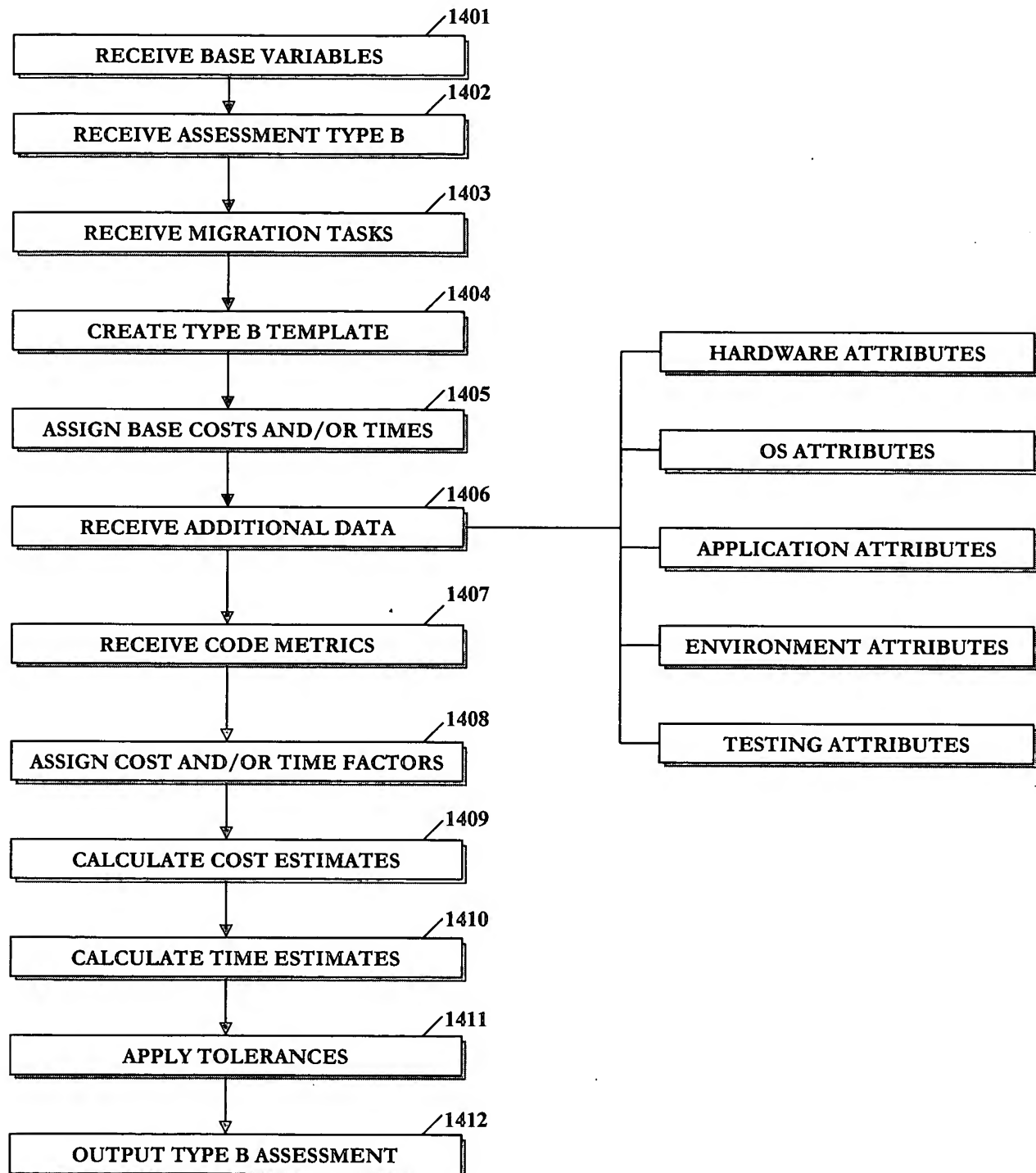


FIG. 14

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CODE COST FACTOR MATRIX FOR {SOURCE-TARGET} MIGRATION						
TASK NO.	MIGRATION TASK	OS DEP = YES	LOW INTEGRITY > AVERAGE	DATA VOL	Calls to Non-Standard Data Keywords	
1	System Build	¹ k ₁	¹ k ₂	¹ k ₃	....	¹ k _q
2	Baseline Test	² k ₁	² k ₂	² k ₃	....	² k _q
3	Migration	³ k ₁	³ k ₂	³ k ₃	....	³ k _q
4	System Test	⁴ k ₁	⁴ k ₂	⁴ k ₃	....	⁴ k _q
5	Export Data	⁵ k ₁	⁵ k ₂	⁵ k ₃	⁵ k _q
6	Import Data	⁶ k ₁	⁶ k ₂	⁶ k ₃	⁶ k _q
7	Deployment	⁷ k ₁	⁷ k ₂	⁷ k ₃	⁷ k _q

FIG. 15

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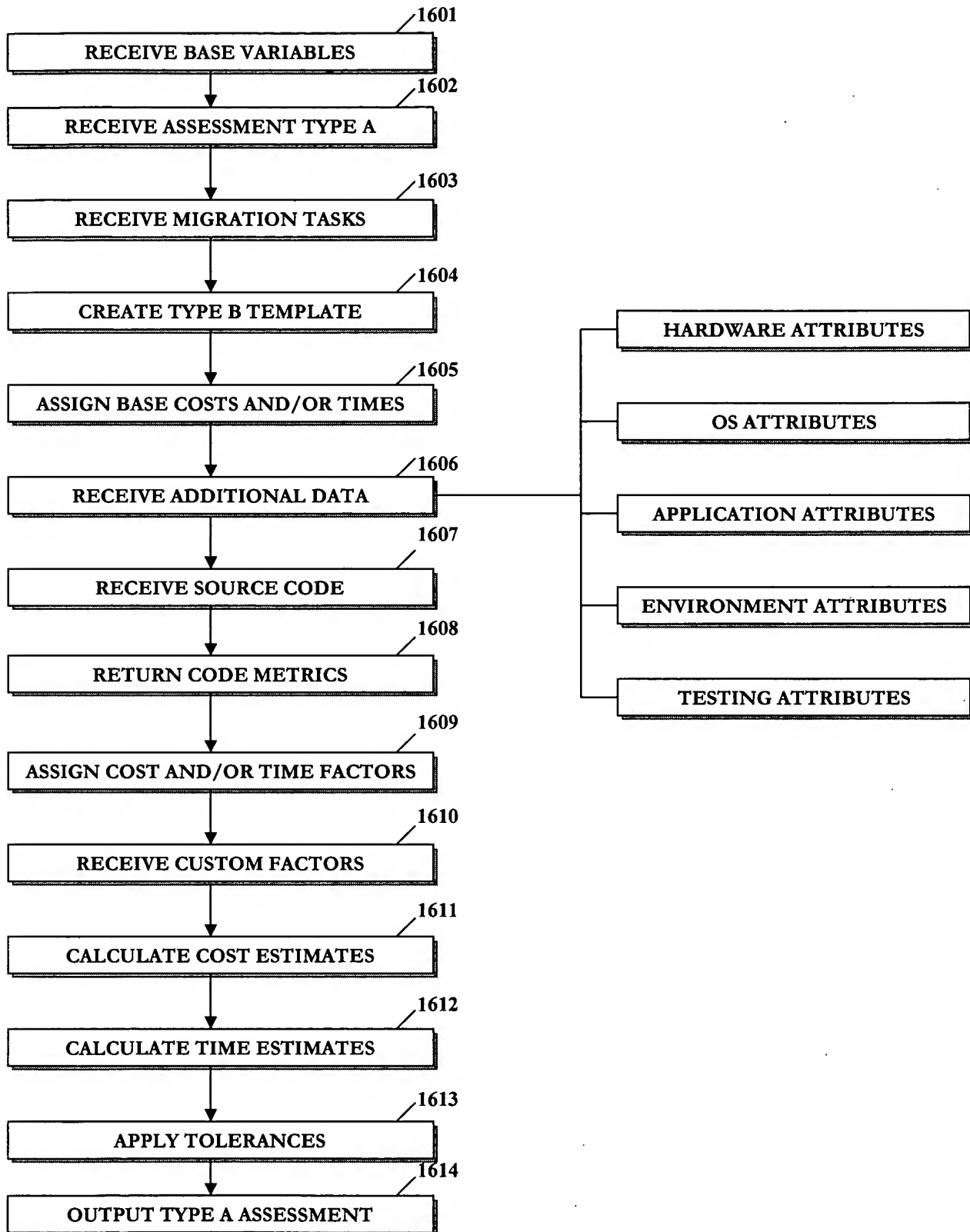


FIG. 16

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CODE TIME FACTOR MATRIX FOR {SOURCE-TARGET} MIGRATION						
TASK NO.	MIGRATION TASK	OS DEP = YES	LOW INTEGRITY	DATA VOL > AVERAGE	Calls to Non-Standard Data Keywords	
1	System Build	1m_1	1m_2	1m_3	....	^1m_q
2	Baseline Test	2m_1	2m_2	2m_3	....	^2m_q
3	Migration	3m_1	3m_2	3m_3	....	^3m_q
4	System Test	4m_1	4m_2	4m_3	....	^4m_q
5	Export Data	5m_1	5m_2	5m_3	5m_q
6	Import Data	6m_1	6m_2	6m_3	6m_q
7	Deployment	7m_1	7m_2	7m_3	7m_q

FIG. 17

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TESTING COST FACTOR MATRIX FOR {SOURCE-TARGET} MIGRATION							
TASK NO.	MIGRATION TASK	CREATE TESTS	APPLICATION RE-BUILD	OFF-SITE TESTING	PROGRESSIVE UNIT TESTS	NON-STANDARD CRITERIA	CUSTOM H/W SIMULATION
2	Baseline Test	${}^2\eta_1$	${}^2\eta_2$	${}^2\eta_3$	${}^2\eta_4$	${}^2\eta_5$	${}^2\eta_r$
4	System Test	${}^4\eta_1$	${}^4\eta_2$	${}^4\eta_3$	${}^4\eta_4$	${}^4\eta_5$	${}^4\eta_r$

FIG. 18

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TESTING TIME FACTOR MATRIX FOR {SOURCE-TARGET} MIGRATION									
TASK NO.	MIGRATION TASK	CREATE TESTS	APPLICATION RE-BUILD	OFF-SITE TESTING	SITE TESTING	PROGRESSIVE UNIT TESTS	NON-STANDARD CRITERIA	CUSTOM H/W SIMULATION	
2	Baseline Test	2_{b1}	2_{b2}	2_{b3}	2_{b4}	2_{b5}	....	2_{br}	
4	System Test	4_{b1}	4_{b2}	$4_{\eta3}$	4_{b4}	4_{b5}	....	4_{br}	

FIG. 19